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10/697,199	10/31/2003	Srinivasan M. Komandur	ASMNUT.008CP1*	9910

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EXAMINER
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MOORE, KARLA A

ART UNIT	PAPER NUMBER
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1763

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/697,199

Applicant(s)

KOMANDUR ET AL.

Examiner

Karla Moore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 0604.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-11, drawn to a workpiece processing tool, classified in class 156, subclass 345.32.
  - II. Claims 12-22, drawn to a method of processing a workpiece, classified in class 156, subclass 345.32.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the apparatus as claimed can be used to practice another and materially different process, for example one not including the steps of a) storing a production route defining movement of the workpiece among a number of the process modules; and/or b) storing a number or recipes for processing the workpiece, the recipes each having a unique name and number of processing parameters associated therewith.
3. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Ms. Tina Chen on 15 March 2005 a provisional election was made without traverse to prosecute the invention of Group II, claims 12-22. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-11 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of

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inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Claim Objections***

6. Claims 12-22 are objected to because of the following informalities: Line 2 of claim 12 reads "a plurality or process modules". Examiner has assumed that the word "or" was meant to be "of" and has examined the claims accordingly. Appropriate correction and/or clarification is required.

### ***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 16-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Each of claims 16-18 includes the limitation "the network". There is insufficient antecedent basis for this limitation in the claim.

### ***Double Patenting***

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claim 22 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 5 of U.S. Patent No. 6,736,929. Although the conflicting claims are not

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identical, they are not patentably distinct from each other because the processing methods described in each are substantially the same, although worded differently.

***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 12-21 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. No. 6,122,566 to Nyugen et al.

13. Nyugen et al. disclose a method of processing a workpiece using a semiconductor workpiece tool including a plurality of process modules (Figure 1--16, 18, 20 and 22) having a robot (82) and a control system including a user interface (202; column 6, rows 26-37), a system controller (72; column 5, rows 1-10) and a process module controller (206) associated with the process modules, comprising the steps of: storing a production route defining movement of the workpiece among a number of the process modules (column 5, row 60 through column 6, row 15); storing a number of recipes for processing the workpiece, the recipes each having a unique name and a number of processing parameters associated therewith (column 5, row 60 through column 6, row 15 and column 7, rows 7-9); selecting the next process module in the production route when a workpiece is substantially completed with an existing process in the production route (column 7, row 63 through column 8, row 6); and moving the workpieces among the process modules in accordance with the selecting step (column 7, row 63 through column 8, row 6).

14. With respect to claim 13, further, in the method the production route includes a number of on-line process modules defined in the production route and at least one off-line process module not included in the production route (column 7, rows 31-45).

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15. With respect to claims 14 and 15, further, in the method the selecting step routes the workpiece in the production route based at least in part in process module fault conditions (column 7, rows 31-45 and 55-61).
16. With respect to claims 16-18, the method further comprises the step of a selected process module retrieves a recipe over the network of control structures (i.e. controllers and user interface) based on a recipe identifier (column 5, row 60 through column 6, row 15).
17. With respect to claims 19 and 20, further, in the method the selecting step routes the workpiece to an available process module based on the production route (column 7, rows 55-61).
18. With respect to claim 21, the method further comprises the step of storing process module status information; and wherein the selecting step includes the step of using the process module status information to determine the next process module in the production route (column 7, rows 31-45 and 55-61).

***Claim Rejections - 35 USC § 103***

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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21. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nyugen et al. as applied to claims 12-21 above in view of U.S. Patent No. 5,620,578 to Hurwitt.

22. Nyugen et al. disclose the invention substantially as claimed and as described above. Including not using off-line chamber in a production route when they are undergoing a cleaning process (column 7, rows 31-45 and 56-62).

23. However, Nyugen et al. fail to teach a number of the process modules include a manual loading window and wherein: the production route includes a number of on-line process modules defined in the production route and at least one off-line process module not included in the production route that can be configured to perform testing, maintenance or other operation while the production route is in operation.

24. Hurwitt teaches providing a processing chamber of a cluster tool with a manual loading window for the purpose of communicating a service module with a process module (abstract and column 7, rows 36-49).

25. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided a number of the processing modules with manual loading windows in Nyugen et al. in order to communicate a service module with each of the modules as taught by Hurwitt.

### ***Conclusion***

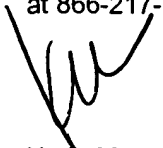
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karla Moore whose telephone number is 571.272.1440. The examiner can normally be reached on Monday-Friday, 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571.272.1435. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC)

at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'K. Moore', written over the printed name.

Karla Moore  
Patent Examiner  
Art Unit 1763  
7 September 2005